

## **REMARKS**

This Amendment responds to the Office Action mailed on December 2, 2004. Claims 1, 5 and 35-37 have been cancelled. Claims 2-4, 6-15, 18, 21-25, 27, 29, 38, 40 and 41 have been amended. New claims 42-47 have been added. Claims 2-4, 6-34 and 38-47 are pending. A diligent effort has been made to respond to each of the rejections contained in the Office Action. It is believed that this Amendment overcomes those rejections and thus places this case in condition for allowance. Reconsideration is respectfully requested.

### **Drawing Objection**

In the Office Action, Figure 13 was objected to because the elements 314 shown as multipliers should have been adders, as described in the specification's description of Figure 13. As required by the Office Action, a replacement Figure 13 in compliance with 37 CFR 1.121(d) and 37 CFR 1.84(c) has been attached in which the multipliers have been changed to adders, as described in the specification. No new matter has been added.

### **Claims Objections**

In the Office Action, claims 23-24 and 41 were objected to because of several listed informalities. The claims have been amended to address each of the objections. No new matter has been added by these amendments.

### **Rejections under 35 U.S.C. § 112**

Claims 1-34, 36 and 38-41 were rejected under 35 U.S.C. § 112 as failing to comply with the enablement requirement. In particular, claims 1, 36, 38, 40 and 41 were rejected because the limitation "transmission swing" in the term "a transmission swing of the input signal" was not described in the

**AMENDMENT TO THE DRAWINGS**

Please replace the originally-filed drawing sheet 8 (Fig. 13) with Replacement Sheet 8, which is attached hereto.

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In a telephone interview on February 24, 2005 with Applicants' representative, Joseph Sauer, Examiner Chang agreed that the above mentioned § 112 objections would be overcome by deleting the word "transmission" from the term "a transmission swing of the input signal." Applicants thank the Examiner for his time during this interview. In accordance with the Examiner's suggestion, claims 6, 8, 9, 22, 38, 40 and 41 have been amended to delete the word "transmission" from "a transmission swing of the input signal" so that the term now reads "a swing of the input signal." The scope of the claims is not changed by these amendments. Rejected claim 36 has been canceled by this Amendment. Applicants submit that claims 6, 8, 9, 22, 38, 40 and 41 are now in condition for allowance as well as any claims directly or indirectly dependent on these claims.

Claims 22, 35-40 and 41 were rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regards as the invention. In particular, in claim 22, the term "each multi-stage equalizer core" lacks antecedent basis. Also, in claims 35 and 41, the term "the equalizer input signal" lacks antecedent basis. Claims 35-37 have been canceled by this Amendment. However, claims 22 and 41 have been amended to address each of above stated rejections. No new matter has been added by these amendments. Applicants therefore submit that claims 22 and 41 are in condition for allowance as well as any claims directly or indirectly dependent on these claims.

### **Rejections under 35 U.S.C. § 103**

In the Office Action, claims 1-5, 7, 10-11, 15-21, 23-24, 29, 31 and 35-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hussein et al. (US 6,148,046) in view of Crawford, Jr., et al. (US 5,940,441). Claims 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hussein et al. (US 6,148,046) in view of Schneider (US 5,184,292). Claims 6, 8-9, 22, 25-28, 30, 32-34 and 38-41 were not rejected under 35 U.S.C. § 103(a). In the February 24 telephone interview with

Applicants' representative, Examiner Chang agreed that claims 6, 8, 9, 22, 38 and 40 would be allowable if rewritten in independent form and amended to overcome the § 112 rejections, and that claim 41 would be allowable if amended to overcome the § 112 rejection.

Applicants do not agree with the rejections under 35 U.S.C. § 103(a). However, in order to expedite prosecution of the present application, claims 6, 8, 9, 22, 38 and 40 have been rewritten in independent form and amended to overcome the § 112 rejections, as suggested by the Examiner. In addition, claim 41 has been amended as suggested by the Examiner to overcome the § 112 rejection. Rejected claims 1, 5 and 35-37 have been cancelled by this Amendment. Rejected claims 2-4, 7, 10-21, 23-24, 29 and 31 depend directly or indirectly or have been amended to depend directly or indirectly from independent claim 6. Therefore, Applicants submit that these claims are now in condition for allowance. Applicants respectfully reserve the right to pursue the cancelled claims in a continuation application.

#### **New Claims**

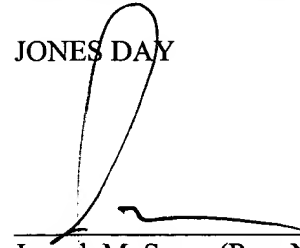
New claims 42 and 43 depend from claim 8, and are therefore patentable for at least the same reasons as claim 8. New claims 44 and 45 depend from claim 9, and are therefore patentable for at least the same reasons as claim 9. Finally, new claims 46 and 47 depend from claim 22, and are therefore patentable for at least the same reasons as claim 22.

#### **Conclusion**

For the foregoing reasons, Applicants respectfully submit that claims 2-4, 6-34 and 38-47 are in condition for allowance. The Examiner is, therefore, respectfully requested to enter this Amendment and pass this case to issue.

Respectfully submitted,

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